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## SUBMITTED ABSTRACT

0.	Paper Number 222			
	Session Name	4. Measurement and integration challenges in the next 20 years		
1.	Title of the paper	Megacities Experiment on integrated Meteorological Observation in China (MEMO)		

2.	Institution	Meteorological Observation Center of CMA				
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## 4. Abstract of the paper

MEMO is initiated by China Meteorological Administration (CMA) and organized by CMA Meteorological Observation Centre (MOC). The experiment is a large scale integrated meteorological observation experiment. MEMO attempt to establish the ground-base remote-sensing integrated observation stations, which are consisted of the dual polarization weather radar, Ka-band cloud radar, LI-band wind profile radar, microwave radiometer and Lidar, and to obtain the high precision vertical structure information of temperature, humidity, wind, hydrometeor (precipitation and cloud), and aerosol in range of the megacity. It will effectively improve the overall quality of meteorological observation data and model assimilation rate, and establish the interaction mechanism of observation and forecast and also solve the key technical problems in the short term forecasting, nowcasting and the environment weather service as well.